

Organizational Health Climate Matters: Cross-Level Findings from the CDC National Healthy Worksite Program

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Occupational Health and Safety – An Important Concern

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- ~3 million workplace injuries and illnesses in US private section annually (Bureau of Labor Statistics, 2014)
 - National economic cost of ~\$250 billion (Leigh, 2011)
 - Non-financial burden on injured workers and their families
- Organizations, government agencies, and researchers motivated to understand underlying mechanisms that contribute to these phenomena



Organizational Culture and Climate

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- **Culture: deeply-rooted values, beliefs, norms and assumptions shared by members of an organization** (Denison, 1996; Pidgeon, 1991; Schein, 1992; Zimolong & Elke, 2006)
 - Stable / Static
- **Climate: shared perceptions, attitudes, and behaviors of employees that are influenced by policies, procedures, and practices** (Denison, 1996; Reichers & Schneider, 1990; Rentsch, 1990; Schein, 1992; Zohar, 2011)
 - The manifestation of culture (Schein, 1992; Zimolong & Elke, 2006)

Health Distinct from Safety

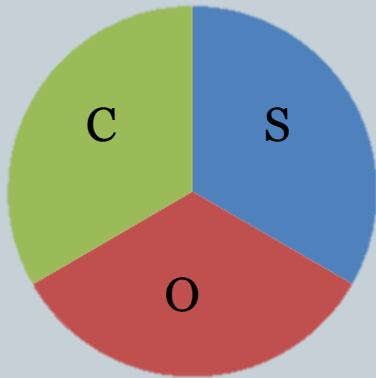
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- Occupational health and safety (OHS) are related, but distinct factors
 - Non-employment life aspects contribute to overall health
 - Reasons “global” individual health important to OHS evaluation
 - Non-work caused health conditions can interfere with working safely
 - Rising cost of health care
 - Adverse impact on work performance and attendance
- (Collins, Baase, Sharda, Ozminkowski, Nicolson, Billotti, Turpin, Olson, & Berger, 2005)



Health Climate

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- Multifaceted Organizational Health Climate Assessment (MOHCA) (Zweber, Henning, & Magley, 2014)
 - Facets
 - ✦ Coworker, Supervisor, Organization
 - Assesses individual perceptions
 - Climate conceptually a multi-level concept
 - ✦ Individual level (micro)
 - ✦ Organization level (macro)

Present Study

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- Explore the micro-level relationship of health climate with employee health and well-being
 - H1: All three organizational facets of health climate will be positively associated with individual health and well-being
- Incorporate macro-level responses and test for cross-level relationships between group-level health climate and individual health and well-being
 - H2: All facets of aggregated organizational-level health climate will be significantly associated with individual health and well-being

Research Project Overview

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- **National Healthy Worksite Program (NHWP)**

- Collaborating partners

- ✦ CDC
- ✦ Viridian Health Management
- ✦ Center for Promotion of Health in the New England Workplace (CPH-NEW)
- ✦ UCONN Health Center
- ✦ UCONN Industrial/Organizational Psychology Department
- ✦ RTI International



- **Overall Project Goals**

- Conduct workplace health assessments
- Identification of individual, organizational and environmental factors that influence health and wellness
- Implementation of prevention and wellness strategies



Participants

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- National sample of 96 organizations
 - Multiple industrial sectors
 - ✦ Mainly service and manufacturing
 - All had less than 1,000 employees
 - ✦ 80% had less than 250 employees
 - Average response rate of 54.8%
- 4,957 employees
 - 57 employees per organization
 - ✦ Range of 7 to 218
 - Age: 43.1 ($SD = 12.5$)
 - 63.8% Female
 - 70.4% White; 18.7% African American
 - Tenure: 7.5 yrs ($SD = 8.5$ yrs)

Predictor Measure

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- **Health Climate**
 - Abridged and adapted version of the Multifaceted Organizational Health Climate Assessment (MOHCA)
 - 5-point scale (1 = strongly disagree; 5 = strongly agree)
 - ✦ **Coworker facet (2-items; mean calculated from both)**
 - “If my health gets worse, my coworkers would support my recovery”
 - “My coworkers would support my use of sick days for illness or mental illness”
 - ✦ **Supervisor facet (1-item)**
 - “My supervisor encourages healthy behavior”
 - ✦ **Organization facet (1-item)**
 - “My organization encourages me to make suggestions about employee safety, health, and well-being”

(Zweber, Henning, & Magley, 2014)

Outcome Measures

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- **General Health**

(1-item)

- “Would you say that in general your health is...?”

- ✦ (1 = poor; 5 = excellent)

(Ware, Kosinski, & Keller, 1998)

- **Biometric Screenings**

(3-items)

- BMI
- Blood Pressure
- Blood glucose levels
 - ✦ (0 = normal; 1 = high)

- **Burnout**

- Exhaustion (2-items)

- ✦ “At work, I often feel emotionally drained.”

- ✦ “After work, I have enough energy for leisure activities”

- Disengagement (1-item)

- ✦ “More and more often I talk about my work in a negative way”

(1 = strongly disagree; 5 = strongly agree)

(Demerouti, Bakker, Nachreiner, & Shaufeli, 2000)

- **Org Satisfaction**

(1-items)

- “Overall I would recommend working with this organization to my family and friends”

- ✦ (1 = strongly disagree; 5 = strongly agree)

- **Job Satisfaction**

(1-item)

- “All in all, how satisfied would you say you are with your job?”

- ✦ (1 = very dissatisfied; 4 = very satisfied)

(NIOSH, 2002)

Group Level Descriptive Statistics and Correlations

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Climate Facet	M	SD	ICC ₁	ICC ₂	R _{wg}	1	2
1. Coworker	3.92	.25	.05	.75	.95		
2. Supervisor	3.79	.258	.05	.75	.97	.75**	
3. Organization	3.76	.34	.11	.87	.97	.46**	.72**

** $p < .01$

Individual Level Descriptive Statistics and Correlations

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Variable	M	S D	1	2	3	4	5	6	7	8	9
1. CoW. Health Climate	3.89	.76									
2. Sup. Health Climate	3.76	.87	.54**								
3. Org. Health Climate	3.74	.87	.43**	.55**							
4. General Health	2.73	.85	.12**	.08**	.08**						
5. Burnout	3.55	.81	.26**	.28**	.30**	.22**					
6. Org Satisfaction	4.01	.89	.46**	.49**	.54**	.09**	.44**				
7. Job Satisfaction	3.27	.63	.32**	.34**	.34**	.10**	.50**	.56**			
8. BMI	71.9%	--	-.04**	-.02	.01	-.31**	-.04**	-.02**	-.01		
9. Hypertension	63.1%	--	-.04**	-.03	.00	-.16**	.01	-.01	.02	.30**	
10. Diabetes	12.0%	--	-.04**	-.02	.01	-.17**	-.01	-.01	.02	.14**	.14**

** $p < .01$

Results – Fixed Effects

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	General Health	Burnout	Organization Satisfaction	Job Satisfaction	BMI ¹	Hypertension ¹	Diabetes ¹
Individual Level (df = 4858)							
Coworker Health Climate (SE)	.10*** (.02)	.13*** (.02)	.23*** (.02)	.12*** (.01)	-.07 (.05)	-.05 (.05)	-.16* (.07)
Supervisor Health Climate (SE)	-.01 (.02)	.12*** (.02)	.19*** (.01)	.11*** (.01)	-.01 (.05)	-.02 (.05)	-.04 (.07)
Organization Health Climate (SE)	.05** (.02)	.14*** (.02)	.33*** (.01)	.13*** (.01)	.02 (.05)	.04 (.04)	.09 (.06)
Aggregated Group Level (df = 92)							
Coworker Health Climate (SE)	.47*** (.13)	-.03 (.14)	.19 (.14)	-.10 (.09)	-1.57*** (.37)	-1.11** (.36)	-.15* (.07)
Supervisor Health Climate (SE)	-.13 (.16)	-.06 (.18)	.05 (.19)	.22 (.12)	1.17* (.50)	.12 (.48)	-.05 (.07)
Organizer Health Climate (SE)	-.13 (.09)	.15 (.10)	.15 (.10)	-.01 (.07)	-.32 (.27)	.39 (.26)	.08 (.06)
Pseudo R ²	.03	.13	.42	.18	-	-	-

¹Log-transformed; *p < .05; **p < .01; ***p < .001

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Pseudo R ²	.03	.13	.42	.18	-	-	-

¹Log-transformed; *p < .05; **p < .01; ***p < .001

Post-Hoc Analysis



What about Overall Health climate?

Individual Level Descriptive Statistics and Correlations

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Variable	M	S D	1	2	3	4	5	6	7	8	9	10
1. CoW. Health Climate	3.89	.76										
2. Sup. Health Climate	3.76	.87	.54**									
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8. BMI	71.9%	--	-.04**	-.02	.01	-.31**	-.04**	-.02**	-.01			
9. Hypertension	63.1%	--	-.04**	-.03	.00	-.16**	.01	-.01	.02	.30**		
10. Diabetes	12.0%	--	-.04**	-.02	.01	-.17**	-.01	-.01	.02	.14**	.14**	
11. Overall Health Climate	3.82	.67	.88**	.81**	.75**	.12**	.34**	.59**	.40**	-.03*	-.03*	-.03

** $p < .01$

Post-Hoc – Fixed Effects

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	General Health	Burnout	Organization Satisfaction	Job Satisfaction	BMI ¹	Hypertension ¹	Diabetes ¹
Individual Level (df = 4980)							
Overall Health Climate (SE)	.14** (.02)	.40*** (.02)	.74*** (.01)	.36*** (.01)	-.06 (.05)	-.04 (.05)	-.12* (.07)
Aggregated Group Level (df = 94)							
Overall Health Climate (SE)	.17 (.02)	.08 (.09)	.44*** (.10)	.12 (.07)	-.73** (.26)	-.46 (.25)	.10 (.34)
Pseudo R ²	.02	.12	.40	.17	-	-	-

¹Log-transformed; *p < .05; **p < .01; ***p < .001

Post-Hoc – Fixed Effects

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	General Health	Burnout	Organization Satisfaction	Job Satisfaction	BMI ¹	Hypertension ¹	Diabetes ¹
Individual Level (df = 4980)							
Overall Health Climate (SE)	.14** (.02)	.40*** (.02)	.74*** (.01)	.36*** (.01)	-.06 (.05)	-.04 (.05)	-.12* (.07)
Aggregated Group Level (df = 94)							
Overall Health Climate (SE)	.17 (.02)	.08 (.09)	.44*** (.10)	.12 (.07)	-.73** (.26)	-.46 (.25)	.10 (.34)
Pseudo R ²	.02	.12	.40	.17	-	-	-

¹Log-transformed; *p < .05; **p < .01; ***p < .001

Discussion

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- New relationship emerge at the group level
 - By health climate facet and overall score
- Health Climate related to objective health indicators
 - Coworker support matters
- Health Climate has strong effect on organization satisfaction
- Future research
 - Work-group level assessment
 - Interventions to improve health culture and climate

Thank you!

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QUESTIONS OR COMMENTS?